



US009636052B2

(12) **United States Patent**
Korman

(10) **Patent No.:** **US 9,636,052 B2**
(45) **Date of Patent:** **May 2, 2017**

(54) **SIMPLE SUGAR CONCENTRATION SENSOR AND METHOD**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **15/093,547**

(22) Filed: **Apr. 7, 2016**

(65) **Prior Publication Data**

US 2016/0213292 A1 Jul. 28, 2016

Related U.S. Application Data

(63) Continuation of application No. 14/822,524, filed on Aug. 10, 2015, now Pat. No. 9,320,463, which is a (Continued)

(51) **Int. Cl.**
G01N 33/48 (2006.01)
A61B 5/145 (2006.01)
(Continued)

(52) **U.S. Cl.**
CPC **A61B 5/14532** (2013.01); **A61B 5/1455** (2013.01); **A61B 5/14558** (2013.01);
(Continued)

(58) **Field of Classification Search**
CPC G01N 33/48; G01J 4/00
(Continued)

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(57) **ABSTRACT**

A glucose sensor comprising an optical energy source having an emitter with an emission pattern; a first polarizer intersecting the emission pattern; a second polarizer spaced a distance from the first polarizer and intersecting the emission pattern, the second polarizer rotated relative to the first polarizer by a first rotational amount Θ ; a first optical detector intersecting the emission pattern; a second optical detector positioned proximal to the second polarizer, the first polarizer and the second polarizer being positioned between the optical energy source and the second optical detector, the second optical detector intersecting the emission pattern; a compensating circuit coupled to the second optical detector; and a subtractor circuit coupled to the compensating circuit and the first optical detector.

30 Claims, 9 Drawing Sheets

